

## Recombinant Equine Interleukin-2 (req IL-2)

**Synonyms:** T-cell growth factor (TCGF), Aldesleukin, Lymphokine

**Introduction:** IL-2 is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by Interleukin 4 and Interleukin 7. The expression of this gene in mature thymocytes is monoallelic which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease which suggests an essential role of this gene in the immune response to antigenic stimuli.

**Description:** Recombinant equine IL-2 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 131 amino acids and having a molecular mass of 15.1 kDa. The req IL-2 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilised from a 0.22 µm filtered solution in PBS, pH 7.4

**Solubility:** It is recommended to spin down before reconstitution. Reconstitute the lyophilized req IL-2 in sterile water to a concentration not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized req IL-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution req IL-2 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE Silver stain.

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Amino acid Sequence:** MSAPTSSSKR ETQQQLKQLQ MDLKLLEGV NNNKNPKLSK MLTFKINMPK  
KATELKHLQC LEEELKPLEE MLKNFLSKDI KELMSNINVT VLGLKGSETR FTCEYDDET GTIVEFLNKWI  
TFCQSIFSTM T

**Biological Activity:** Determined by its ability to induce proliferation of murine cell line D10.G4.1 the ED<sub>50</sub> was found to be 5 ng/ml.

**For research only.** Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	18340020
<i>medium</i>	20 µg	Cat.N°	18340024
<i>large</i>	100 µg	Cat.N°	18340026

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Gladiolenweg 2; 26169 Friesoythe; Germany  
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)